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DEPARTMENT OF RESOURCE MANAGEMENT

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Environmental Health Division

State Small Water System Report:

II. Water Monitoring Requirements and Bacteriological Sample Siting Plan

This report is comprised of the following sections:

|      |  |   |
|------|--|---|
| I.   | Technical Report   | A description of the water system, number of connections, water treatment, and permit requirements.           |
| II.  | Water Monitoring Requirements and Bacteriological Sample Siting Plan | A detailed description of the chemical and bacteriological monitoring requirements and the sampling locations |
| III. | Emergency Notification Plan  | Notification system that will be employed if contamination is identified in the water system                  |
| IV.  | Operations Plan  | A description of the general operations of the water system   |
| V.   | Maps and Attachments   | Please include required Attachments at the back of the packet   |

For new permit applications, please complete all sections.

Changes such as a change of ownership, change of management, identification of potential contamination, expansion of the water system, or other changes may require revision of specific sections.

**ATTACHMENTS** – Please indicate the included attachments. Submittals marked with an asterisk \* are required

- |   |  |
|---|--|
| <input type="checkbox"/> 6. (II.) Bacteriological Sample Siting Plan* | <input type="checkbox"/> 9. (II.) Treatment Components Spec. Sheet |
| <input type="checkbox"/> 7. (II.) Chemical Source Sampling Results*   | <input type="checkbox"/> 10. (II.) Treatment Components Schematic  |
| <input type="checkbox"/> 8. (II.) Bacteriological Sample Results*     |  |

II. Water Monitoring Requirements and Bacteriological Sample Siting Plan

A. **Water Monitoring** – The water system is advised of the following requirement:

New and existing water supply wells may be subject to monitoring of static ground water levels. Actual measurements of ground water levels should be collected and recorded from each well semi-annually during the spring and fall by use of the sounding port on the wellhead or from a designated onsite monitoring well. The date, time and information regarding the well's status (active, standby, or non-operational) along with the water level in feet below ground surface shall be included in the recording.

Note: Where metering or sounding ports are lacking, electric-power-consumption records or rated capacity of the well can be used as surrogates for actual pump data

**B. Chemical Monitoring:**

Chemical sampling of all sources must be completed prior to issuance of a permit to operate.  
Please submit copies of the lab results to document meeting the testing requirements

**Chemical Testing Performed:** *(check all that apply)*

- |   |                       |
|---|-----------------------|
| 1. <input type="checkbox"/> * Inorganic Chemicals ( <i>Table 64431-A</i> )                  | Date performed: _____ |
| 2. <input type="checkbox"/> * Fluoride, Iron, Manganese, Chlorides & Total Dissolved Solids | Date performed: _____ |
| 3. <input type="checkbox"/> Synthetic Organic Chemicals                                     | Date performed: _____ |
| 4. <input type="checkbox"/> Volatile Organic Chemicals                                      | Date performed: _____ |
- \*Testing Required

**C. Bacteriological Monitoring:**

A bacteriological sample shall be taken from each source prior to treatment.  
Please submit a Bacteriological Sample Siting Plan and copy of lab results

**1. Bacteriological samples shall be collected by:**

Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
E-Mail Address: \_\_\_\_\_ Fax No.: \_\_\_\_\_

**2. Bacteriological samples shall be submitted to the eLap certified lab:**

Name of Laboratory: \_\_\_\_\_ Phone No.: \_\_\_\_\_

**3. Sample Collection**

Service Connections: \_\_\_\_\_ Population Served: \_\_\_\_\_ (Information from I.(C)(2) and I.(C)(3))  
Sampling Frequency:  Monthly  Quarterly  Other: \_\_\_\_\_

**4. Sample Locations**

**The sample locations shall be labeled on the submitted maps of the water system area in Section V.**

The following describes the routine sample location, what months the location will be sampled and where follow-up (repeat) samples will be taken in the event of a “positive” routine sample.

The routine samples shall be analyzed for the presence of total coliform bacteria and E. coli

**The routine bacteriological sample site should be a water faucet that:**

- Is routinely used for “human consumption” (ie. hand washing, drinking, bathing, cooking)
- Is in good working order
- Does not have an aerator, or has an aerator that can be easily removed
- Has a very low risk of bacteriological contamination from use or exposure

**5. Sample Frequency**

**All quarterly samples must be taken during the calendar quarter.**

Quarterly samples should be taken on a routine frequency during the same month of each quarter. Sample results are due to be submitted to this office **by no later than the 10<sup>th</sup> of the following month.**

|                                | 1st  | 2nd  | 3rd   |
|--------------------------------|------|------|-------|
| <b>1<sup>st</sup> Quarter:</b> | Jan. | Feb. | Mar.  |
| <b>2<sup>nd</sup> Quarter:</b> | Apr. | May  | June  |
| <b>3<sup>rd</sup> Quarter:</b> | July | Aug. | Sept. |
| <b>4<sup>th</sup> Quarter:</b> | Oct. | Nov. | Dec.  |

*Samples shall be taken consistently from the 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> month of each quarter*

*1<sup>st</sup> month: January, April, July and October*

*2<sup>nd</sup> month: February, May, August, November*

*3<sup>rd</sup> Month: March, June, September, December*

**6. Routine Samples**

| <b>Routine Sample Location(s):</b><br><i>(location name or address)</i> | <b>Description</b><br><i>(hose bib, sink faucet, sample tap)</i> | <b>Sampling Months:</b><br><i>1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup></i> |
|---|--|---|
| Q1:   |  |   |
| Q2:   |  |   |
| Q3:   |  |   |
| Q4:   |  |   |

**7. Repeat/Follow-Up Sample:**

If a routine sample is total coliform positive, a repeat sample shall be collected from the same location within 48 hours.

The repeat sample shall be analyzed for the presence of total coliform and E. coli.

The water supplier shall notify this office of the repeat sample result within 48 hours.

**Certification:**

I agree to conduct bacteriological water sampling pursuant to this plan and in compliance with all regulations of the California Code of Regulations, Div. 4, Chapter 14 pertaining to the bacteriological water quality monitoring requirements of State Small Water Systems and as required by this Division.

Report Prepared by: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

| California Code of Regulation (CCR) Title 22, Section 64431:<br><b>Table 64431-A – Inorganic Chemicals*</b> |  |
|---|--|
| <b>Chemical</b>   | <b>Maximum Contaminant Levels (mg/L)</b> |
| Aluminum  | 1  |
| Antimony  | 0.006                                    |
| Arsenic   | 0.05                                     |
| Asbestos  | 7 MFL**                                  |
| Barium  | 1  |
| Beryllium   | 0.004                                    |
| Cadmium   | 0.005                                    |
| Chromium  | 0.05                                     |
| Cyanide   | 0.15                                     |
| Fluoride  | 2.0                                      |
| Mercury   | 0.002                                    |
| Nickel  | 0.1                                      |
| Nitrate   | 10                                       |
| Nitrate + Nitrite   | 10                                       |
| Nitrite (as nitrogen)   | 1  |
| Perchlorate   | 0.006                                    |
| Selenium  | 0.05                                     |
| Thallium  | 0.002                                    |

\*\*MFL = million fibers per liter; MCL for fibers exceeding 10mm in length.